



Castle Airport, Atwater, CA

95% of Castle Environmentally Ready for Reuse



These are some of the goals for the former Castle Air Force Base, shared by the Restorations Advisory Board, the Joint Powers Authority, and the community in general. A lot of things need to be accomplished to make these goals come to pass. A critical accomplishment, without which reuse will not happen, is environmental restoration. Before any parcel of the base can be used, it must be found environmentally suitable for reuse.

The base conversion process from the legal point of view is shown in the simplified diagram on page 3. In order for a portion of the base to be leased or deeded to a reuser, a Finding of Suitability to Transfer (FOST) or a Finding of Suitability to Lease (FOSL) must be accomplished. FOSTs or FOSLs have been completed for 95% of the base, and work is nearing completion on the remaining 5%.

What is a FOST or FOSL, and what is the difference?

A FOST is a legal document that lists environmentally related findings about a particular parcel of land, and states its suitability to be transferred by deed to a new owner. Examples of findings the FOST might list include:

- Restrictions on reuse activities, which will ultimately be listed in the deed.
- The past storage of any hazardous substances on the property.
- The existence of an installation restoration program (IRP) site.
- The presence of underground storage tanks, oil/water separators.
- Asbestos, lead-based paint, polychlorinated biphenyls, and other potential

environmental contaminants.

- The existence of wetlands or endangered species.

The FOST also contains a statement on how the concerns of the regulatory agencies were addressed.

The FOSL is very similar to a FOST, and contains largely the same information. The main difference is that the property is to be leased, rather than sold/transferred by deed. FOSLs contain restrictions on what the lessee can do with the property.

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Some property might be suitable to be temporarily leased, but not yet ready for transfer, due to its environmental conditions. If people working on the property are not at risk from contaminants, but there are contaminants on site that still require remediation, a FOSL might be appropriate. FOSLs allow the Air Force to maintain sufficient control over the parcel to insure the lessee isn't exposed to health risks, and allow access to the parcel to conduct required environmental remediation.

What are the criteria for a FOST/FOSL?

The goal of the FOST/FOSL is to insure environmental conditions on the property do not present an unacceptable risk to human health or the environment. To accomplish this, the Air Force researches and reviews all available records, remedial investigations and remedial actions related to the site; interviews former employees, and physically inspects the site. Some of the documents reviewed might include the Final Environmental Impact Statement for the Disposal and Reuse of Castle AFB (FEIS), the FEIS Record of Decision (ROD-describes the disposition plans for the base), and the basewide Environmental Baseline Survey (EBS describes current conditions on the base).

If there is no risk to human health or the environment, and the property is not a part of an IRP cleanup, then the property may be transferred as detailed in the Disposal and Reuse ROD. If there is a risk brought about by specific activities, then the FOST/FOSL would require restrictions against those activities to be a part of the deed. A FOSL might be most appropriate while remediation is ongoing, until environmental contamination is reduced to below legal limits.

Recent legislation may allow the transfer of property before the remediation is completed in some cases. A FOST would then be appropriate.

The FOST would contain the restrictions necessary to insure the Air Force could complete the remediation.

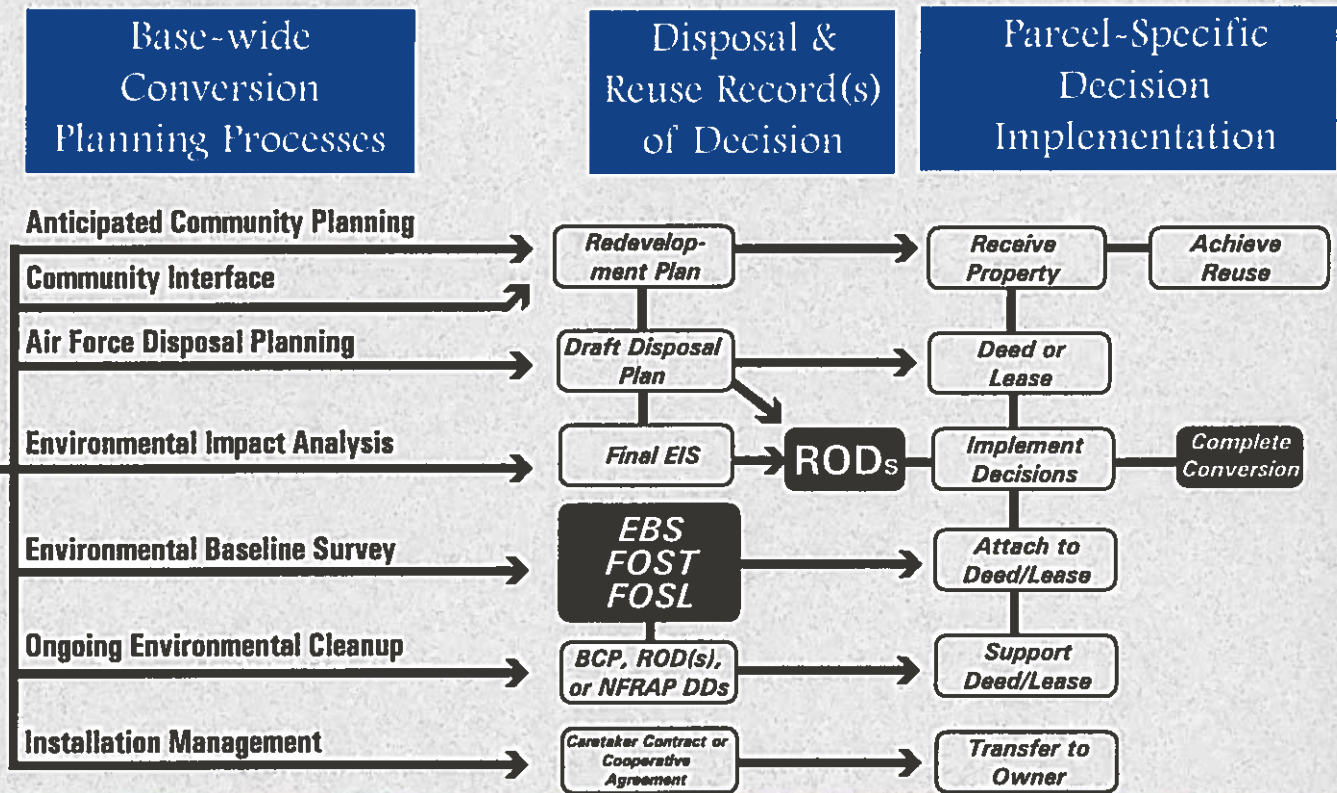
Once we have a FOST/FOSL, what is done then?

Most parcels of Castle AFB are being leased and subleased due to a FOSL being prepared rather than a FOST. This is a result of most of the base property overlying TCE contaminated groundwater. The Air Force needs guaranteed access to the property, yet it is suitable for reuse, since the contaminated groundwater is approximately 70 feet below ground and presents no health hazard.

However, some parcels or parts of parcels have been transferred. There are several mechanisms by which this can be accomplished.

- First is the assignment of property to another Federal agency at no cost to the recipient, often referred to as intergovernmental transfers. This was the means used to transfer 660 acres northeast of the runway to the Federal Bureau of Prisons.
- A similar type of transfer is a public benefit conveyance to an eligible public entity, also at no cost to the recipient. An example of this type of transfer is the Aviation Challenge/Challenger Learning Center parcel, including the chapel, classrooms, and quarters.
- Another possibility is the negotiated sale to a state or other entity, which has not been done at Castle.
- Competitive Public Sale and Economic Development Conveyance are the remaining means of transfer. These methods can be used to attract private industry and businesses to the base. These are being contemplated for the 150 acres that have not yet had a FOSL or FOST done on them. Also, they will apply to much of the rest of the base as the groundwater remediation is completed and those areas become suitable for transfer.

Base Conversion Process Flow chart Architecture



The Man Behind The Success



Ramon Aberasturi was the individual who single-handedly researched the necessary information and wrote the FOSTs and FOSLs for Castle reuse. Working in two temporary positions from 1994 to January, 1997, he developed environmental site assessments and other environmental documents required to lease or transfer real property at Castle. He pursued this task using whatever means needed, from negotiating with governmental officials to in-depth research in massive documents to hands-on development of maps and charts on the computer. His tenacious dedication has led to 95% of the base being found environmentally suitable for lease or transfer so far, and he has laid the groundwork to complete the remaining 5%.

Having wrapped up his task at Castle, Ramon is moving on to even greater challenges. He has been hired by the Army Corps of Engineers in Sacramento to be a Realty Specialist for U.S. Army closure bases. He starts his new job in February, and will move to Sacramento in June with his wife Barbara and their three sons.

We at the Base conversion Agency at Castle will miss him, and wish him the best in his new job, and in all future endeavors.

Community Education a Priority for Castle

A current, ongoing project has proven Castle Engineers have a strong commitment to keeping the community informed. Todd Lanning, the engineer in charge of groundwater remediation, has taken it upon himself, often on his own time, to personally inform Atwater residents of cleanup activities that could affect them.

The Air Force has been testing the groundwater west of the CastleVista housing area (see the January, 1997 Enviro-Factsheet) to determine the extent of a groundwater contamination plume. This effort involved the drilling of several monitoring wells in residential neighborhoods. Todd decided to put off his busy schedule, and knock on doors to personally inform the residents of what would happen, and to answer questions. He felt they deserved to know why the drilling was necessary, and they should not be concerned by a drill rig's sudden appearance. "It wouldn't be right to have a large, noisy drill rig unexpectedly show up and drill a hole in someone's sidewalk without warning them in advance."

Enlisting the aid of the Community Relations Program Director, Russ Stowe, he developed an information handout describing the contaminant the Air Force was looking for and how they were

conducting the search. Each resident received the handout, along with current factsheets describing other aspects of the environmental cleanup at Castle.

Bob Matthews, Base Environmental Coordinator, supports Todd's efforts. "I think this endeavor provides the Air Force with a great opportunity to hear the concerns of the community while providing a common courtesy."

Todd's initiative has already yielded dividends both for the Air Force and the community. He was able to juggle the drilling schedule to accommodate a resident recovering from surgery. Another resident notified the Air Force of a potentially hazardous situation at one of the drill sites, enabling a rapid fix of the problem. Trying to accomplish this project without community involvement would have turned these dividends into problems.

Nearly all of the 96 residents Todd and Russ have talked to so far have appreciated the personal contact and information, and many asked insightful questions about the restoration program. With this positive response, Todd plans to keep knocking on doors until the plume is defined and remediation is underway.

Castle Cleanup "On-Line"

The Base Conversion Agency at Castle recently became connected to the internet. It has enhanced their ability to communicate with other governmental agencies, private companies, academia, and the public.

The internet has proven invaluable as a research tool. One Castle environmental engineer was able to download an EPA groundwater contamination computer model. He is now better able to predict the likelihood of soil contamination reaching the groundwater, and is also able to provide a backup to estimates developed by remediation contractors. Another engineer needed historical weather data to characterize the wetlands on base. With the base weather station long closed, he was able to get on the internet and obtain the information from the Air Force Combat Climatology Center.

This broad database gives BCA engineers an opportunity to compare proposed cleanup actions with those taken by others. Lessons learned by other cleanup efforts can be applied at Castle to save time and money, and insure an efficient, effective environmental restoration.

If you have questions concerning the Air Force Installation Restoration Program at Castle AFB, you can e-mail them to:

castle@cell2000.net

Castle Airport Project Update

Groundwater Projects

Operable Unit 1 (OU-1)

OU-1, extracting groundwater from the Main Base Plume "hot spots", has treated a total of 331 million gallons of water. In the process, it has removed 224 pounds of TCE. The removal rate continues to be steady at low concentrations (89 ppb), since the hot spots have been largely removed. Due to the OU-1 expansion project, the system is now treating 390 gallons per minute. One extraction well is temporarily shut down for repairs.

Operable Unit 2 (OU-2)

OU-2 is up and running, and treating water at a rate of 1100 gpm. It is undergoing test procedures, and having some minor bugs involving data flow between components worked out of the system. Results of the tests will be used to optimize plant operation and the remediation of the groundwater.

Castle Vista

Since 17 December, 1996, 11 additional monitoring wells have been installed, and the DCE plume boundaries appear to be well characterized (see article in the January Enviro-Factsheet). Two additional wells are being installed the second week of February to fill in the final data gaps.

Soil Projects

Underground Storage Tanks (USTs)

The first charge of 7825 yd³ of contaminated soil is in the land farm treatment cell, which is less active during the rainy season. Oil/water separator soils often contain chlorinated solvents and heavy metals, and cannot be landfarmed. They are being stored, pending a decision on whether they should be used as base material for landfill caps. Further investigation of the removal sites is being accomplished to determine if additional remediation will be required. The choice of remediation includes excavation, soil vapor extraction, and bioventing.

Fire Training Area One (FTA-1)

The two SVE systems are in place. The first system, extracting from a plume of mostly petroleum hydrocarbons, is up and running. The second SVE system, designed to treat a combination of hydrocarbons and TCE, has been installed and is undergoing testing. An erosion problem on the cap due to heavy rains was solved with the use of mats. About 100 lbs TCE and 7500 lbs of fuel have been removed to date. The project completion is estimated to be December of 1997.

Discharge Area Four (DA-4)

SVE operations began in early August, and may be complete. About 325 lbs of TCE was removed, mostly early in the SVE operations. Pulsing was conducted to determine if there was any contamination. Project completion is still scheduled for August of 1997, although formal site closeout is currently being coordinated with the agencies.

Fuel Spill One (FS-1)

The SVE system has removed over 150,000 pounds of aircraft fuel since March of 1995. Based on an evaluation of the residual contamination, the Air Force had determined that no further SVE operations are required.

Earth Technologies Corp. Ten (ETC-10)

Planned remediation at this former trap and skeet range is excavation down to one foot. This would remove the lead, PAHs, arsenic, and antimony contamination from the shot and clay pigeons. Since excavation would temporarily impact a wetland and an endangered species habitat, the project is on hold pending concurrence from the Corps of Engineers and the Fish and wildlife Service.

Discharge Area Eight (DA-8)

DA-8 construction is complete, and the system was started in late January. It is undergoing two weeks of tests and sampling to determine airflow from the wells, TCE concentrations, and removal efficiency. Design modifications for noise suppression and access are being implemented to support base reuse. Remediation should be complete by February of 1998.

Administrative Documents

Source Control Operable Unit (SCOU)

The Draft Final SCOU RI/FS response to comments package was provided to the regulatory agencies at the January RPM meeting. The DTSC feels there still are outstanding issues, and will ask for an extension to the Final SCOU RI/FS. The Air Force has incorporated agency comments on the draft SCOU Proposed Plan, and expects to deliver the draft final to the agencies by mid February. The Draft SCOU Record of Decision, delivered to both the regulatory agencies and the Restoration Advisory Board (RAB), has no formal comments yet. DTSC feels that it is premature to comment on it without a Final SCOU RI/FS. The Air Force prefers to move ahead, and not allow minor differences to obstruct progress, particularly in light of the Air Force's commitment to support timely economic redevelopment of Castle Airport and Aviation Development Center by having all RD/RAs in place by 30 Sep 98.

Comprehensive Basewide (CB)

The Air Force received the Finalized CB Part I Groundwater Record of Decision (ROD) on 17 Dec 96, and final signature date is expected on 1 Feb 97. A workplan to accomplish groundwater remediation at Castle Vista will be submitted to the regulators by 31 Mar 97. The Air Force is pushing for accelerated review of the workplan to get a rapid start on cleaning up the contaminant plume.

Environmental Forum

Environmental Forum is designed to answer environmental questions from people living in communities surrounding Castle (Atwater, Merced and Winton). In addition, terminology pertaining to environmental issues is also explained.

Q: Why do you put two monitoring wells right next to each other in some locations?

A: An initial investigation typically samples the water at a given depth. A later follow-up investigation may need to check the water at a different depth, which requires a new well. A good example of this is the Castle Vista plume investigation. Most of the wells are completed to 80 to 90 feet below ground surface (bgs), and later a second well was completed to 110 to 120 feet right next to existing wells in a couple of cases.

Q: Is the contamination the reason my water tastes so bad?

A: The water delivered to your house through the Atwater municipal water system is not the same as the contaminated groundwater. TCE and DCE contamination is primarily in

the shallow hydrostratigraphic zone, or aquifer, with very low concentrations in next lower, or sub-shallow, layer. Atwater municipal production wells are located away from the plumes, and also draw water from a much deeper aquifer. The groundwater remediation program at Castle is designed to keep the plumes from getting closer to the production wells while accomplishing cleanup.

Community Relations Contacts

Questions regarding this fact sheet or other environmental activities concerning Castle Air Force Base should be directed to the following.

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